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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/685,240

10/14/2003

Leroy Braun

M33.12-0024

5742

164

7590

03/13/2006

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EXAMINER

CHAPMAN JR, JOHN E

ART UNIT

PAPER NUMBER

2856

DATE MAILED: 03/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/685,240

Applicant(s)

BRAUN ET AL.

Examiner

John E. Chapman

Art Unit

2856

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-21 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on January 30, 2006 has been entered.
2. The terminal disclaimer filed on January 30, 2006 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 5,811,681; 6,416,482; 6,644,120 and 11/053,408 has been reviewed and is accepted. The terminal disclaimer has been recorded.
3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 6-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 07-308310 (the '310 publication) in view of Slavin (4,489,610) and Delisle (3,809,811).

Regarding claim 12, the '310 publication discloses a computerized audiometer 1 comprising a test tone generator 4 operable to deliver audible test tones to speakers 9, 10; an input/output interface SI3, S2I; and a central processing unit 3 comprising software programmed to control the test tone generator to deliver test tones to speakers 9, 10, monitor a subject's

responses to the tones, detecting when an error has occurred in the test subject's responses, and delivering a message to a display 26 to notify the examiner and/or patient that the response from the patient is a mistake. See paragraph 8. The '310 publication discloses a restart button on control panel 2 in order to resume delivery of the test tones once the examiner has provided audible corrective instructions to the patient. See paragraphs 42 and 43. The '310 publication does not indicate whether the speakers 9, 10 are earphones. However, it is well known in the art to use earphones when performing an audiometric test, as taught by headset 20 of Slavin and earphones 50 in Fig. 1 of the admitted prior art, and it would have been obvious to use earphones for speakers 9, 10 of the '310 publication in order to prevent a good ear from hearing examination sounds given to an ear with poor hearing. See paragraph 3. Accordingly, the primary difference between the claimed invention and the prior art consists in providing software to deliver audible corrective instructions to the earphones in response to the detected errors, and automatically resume delivery of the audible test tones after the audible corrective instructions are delivered. The '310 publication teaches directly instructing a test subject to release the response button 24A by displaying a message on display 26 (see paragraph 84), and alternatively teaches using voice as a means of notification that the subject is continuing to press the response button (see paragraph 85). Slavin discloses an audible instruction generator 16 under the control of a central processing unit 12 for providing audible instructions to a user for the conduct of an audiometric test (see column 2, lines 35-43). It would have been obvious in view of Slavin to provide an audible instruction generator under the control of the central processing unit 3 of the '310 publication for the purpose of providing audible instruction to the test subject in order to correct the error, i.e., to instruct the subject to release the response button. It would have been

Art Unit: 2856

obvious to automatically resume delivery of the audible test tones after the audible corrective instructions are delivered. The mere replacement of a manual operation with an automatic operation that accomplishes the same result is generally considered to be a design consideration within the skill of the art. *In re Venner*, 262 F.2d 91, 120 USPQ 192 (CCPA 1955). Moreover, the object of providing an automatic audiometer that no longer requires the intervention of an operator is recognized in the art. See column 1, lines 57-64, of Delisle et al. Accordingly, it would have been obvious to one of ordinary skill in the art to automatically switch the output of the system back to test signals of the audiometer once the audible corrective instructions have been output.

Regarding claim 13, the '310 publication teaches storing the results of the audiometric test in a storage memory (see paragraph 26). Note also column 2, lines 61-67, of Slavin.

Regarding claim 14, the results of the audiometric test are stored in a storage memory for later retrieval. The only further difference between the claimed invention and the prior art consists in displaying the results on the display 26. If the '310 publication does not teach displaying the test results on the display 26, it would have been obvious to one of ordinary skill in the art to retrieve the test results stored in the computer 3 and display it on the display 26 attached to the computer.

Regarding claim 15, the only further difference between the claimed invention and the prior art consists in providing a relay circuit. Delisle discloses an audiometer comprising a relay 22 for connecting either the test signal from the oscillator 20 or the sound signals from the tape player 12 with earphones 40. It would have been obvious to provide a switch, such as relay 22 of Delisle, in order to connect either the signal from the sine wave generator 4 of the '310

Art Unit: 2856

publication or that from the audible instruction generator 16 of Slavin with the speakers 9, 10 of the '310 publication. The advantage of using the same speakers 9, 10 for both the test tones and verbal instructions would have been obvious to one of ordinary skill in the art.

Regarding claim 6, note the above remarks concerning claim 15. The audiometer of the '310 publication comprises "a multimedia audiometer" in that it produces both sound (speakers 9, 10 and alarm 25) and visual display (26). The term "multimedia" is here interpreted to mean capable of producing sound waves and/or visual images. Note also page 14, lines 11-14, of applicant's specification. The only further difference between the claimed invention and the prior art consists in providing microprocessor circuitry operatively coupled to the computer. No function is specifically assigned to the microprocessor circuitry. Since it is not clear that the microprocessor circuitry recited in the claim performs any function, the microprocessor circuitry may be operatively coupled to the CPU 3 for any reason. It would have been obvious to operatively connect a video card to the CPU 3 in order to drive the display 26, which video card typically comprises microprocessor circuitry including a memory. In addition, the '310 publication teaches storing the results of the audiometric test in a storage memory but does not illustrate a storage memory (see paragraph 26). It is well known in the art to store data in the memory of a microprocessor circuitry, and merely to store the audiometric test results of the '310 publication in the memory of a microprocessor circuitry would have been obvious to one having ordinary skill in the art.

Regarding claim 7, note the above remarks concerning claim 13.

Regarding claim 8, the computer operates according to a pre-programmed logical testing procedure.

Regarding claim 9, the '310 publication teaches the use of a standard pure sound examination method (see paragraph 22). It is not clear whether the disclosed method comprises the Hughson-Westlake procedure. Nevertheless, the Hughson-Westlake procedure is a standard pure sound examination method and, if the disclosed method is not the Hughson-Westlake procedure, it would have been obvious to one of ordinary skill in the art to substitute one pure sound examination method for another.

Regarding claim 11, it would have been obvious to connect a host computer to the CPU 3 in order to control a number of similar CPU's and thereby simultaneously test a plurality of test subjects, and to store the software for operating the system in microprocessor circuitry of the host computer.

Regarding claim 16, note the above remarks regarding claim 12.

Regarding claim 17, the steps are performed according to a logical testing procedure.

Regarding claim 18, note the above remarks concerning claim 9.

Regarding claim 20, note the above remarks concerning claim 14.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over the '310 publication in view of Slavin and Delisle as applied to claim 16 above, and further in view of the RION AA-75 Audiometer Operation Manual (RION).

The only further difference between the claimed invention and the prior art consists in halting the audiometric test when a certain number of errors are determined. RION teaches recording when there is an abnormal response and halting an audiometric test if there are two

Art Unit: 2856

abnormal responses (paragraph 6 on page 131). Accordingly, it would have been obvious to halt the audiometric test if two abnormal responses are determined.

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

7. Claims 16-21 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 6-9, 11 and 19 of copending Application No. 11/043,408. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

8. Applicant's arguments filed January 30, 2006 have been fully considered but they are not persuasive.

Claim 6. Applicant argues that the '310 publication discloses two different routines for responding to a detection of an error, the first involving the delivery of an additional test tone 10dB greater than the previously delivered tone, and the second in which test tones are interrupted and a notification is generated. Applicant argues that it would not have been obvious to replace the first routine with the second routine. However, it is not necessary to replace the first routine with the second routine in order to meet the limitations of claim 6. Rather all that is necessary is to modify the second routine so as to deliver audible corrective instructions to the

earphones in response to the detected errors, and automatically resume delivery of the audible test tones after the audible corrective instructions are delivered. The suggestion to modify the second routine can be found in the '310 publication and Slavin. The '310 publication teaches directly instructing a test subject to release the response button 24A, as well as using voice as a means of notification that the subject is continuing to press the response button. See paragraph 85. Slavin discloses an audible instruction generator 16 under the control of a central processing unit 12 for providing audible instructions to a user for the conduct of an audiometric test (see column 2, lines 35-43). It would have been obvious in view of Slavin to provide an audible instruction generator under the control of the central processing unit 3 of the '310 publication for the purpose of providing audible instruction to the test subject in order to correct the error, i.e., to instruct the subject to release the response button. The suggestion to automatically resume delivery of the audible test tones is generally available in the art. It is generally held that that the replacement of a manual operation with an automatic operation that accomplishes the same result is within the level of ordinary skill of the art. *In re Venner*, 262 F.2d 91, 120 USPQ 192 (CCPA 1955). Moreover, the object of providing an automatic audiometer that no longer requires the intervention of an operator is recognized in the art. See column 1, lines 57-64, of Delisle et al. The reference to the first procedure in the last Office action was meant to underscore the fact that the '310 publication teaches automatically resuming testing if the subject releases the response button, albeit in response to a prompt (test tone 10dB greater than the previously delivered tone) and not a corrective instruction.

Applicant refers to the declaration under 37 CFR 1.132 of Roger C. Thede that there is no teaching or suggestion in the '310 publication that delivery of instructions/notification can be

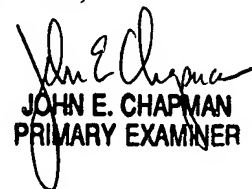
Art Unit: 2856

followed by anything but a manual restart by the examiner. It is agreed that system disclosed in the '310 publication requires a human test administrator to deliver an explanation to a test subject and then switch the audiometer back to outputting test tones once the test administrator has completed the explanation. However, the issue is not whether the '310 publication discloses a system that does not require human intervention, but whether resuming testing without human intervention would have been obvious to one of ordinary skill in the art. Mr. Thede states that in his opinion, it would not have been obvious to a person skilled in the art of electronics and software design to modify the algorithm performed by the system described in the '310 publication so that resumption of testing following interruption and error notification could be done automatically under computer control. However, such is a legal conclusion and an opinion as to a legal conclusion is generally not entitled to any weight. See MPEP 716.01(c)(III). Accordingly, Mr. Thede's opinion on the ultimate legal issue of obviousness is not given any weight. It is not evident that the modification of the prior art to meet the claim limitations would require the effort indicated by Mr. Thede. For example, the claim merely recites "errors in the test subject's responses" and not "all types of errors which might be committed by any given test subject." Hence, the prior art need not be modified so as to anticipate "all types of errors which might be committed by any given test subject." Furthermore, the fact that a modification may require significant design work does not show that it would have been beyond the level of ordinary skill in the art. Rather, the level of ordinary skill in the art is high, as evidenced by the '310 publication, and one of ordinary skill in the art would have been expected to be capable of significant design work.

Applicant argues that the proposed modification of the '310 publication fails to disclose all of the element of claim 6, specifically, software that controls a switch "to switch to the second state when errors are detected in the test subject's responses and to automatically switch back to the first state following delivery of the instructions to the earphones so that testing is resumed without human intervention" (underlining original). However, the desire to replace a manual operation with an automatic operation that accomplishes the same result is generally held to be within the level of ordinary skill of the art. *In re Venner*, 262 F.2d 91, 120 USPQ 192 (CCPA 1955). Moreover, the object of providing an automatic audiometer that no longer requires the intervention of an operator is recognized in the art. See column 1, lines 57-64, of Delisle et al.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John E. Chapman whose telephone number is (571) 272-2191. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hezron Williams can be reached on (571) 272-2208. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


JOHN E. CHAPMAN
PRIMARY EXAMINER